

FIBER OPTIC TRANSMISSION LINES ON AN SOC

Abstract

Disclosed is an integrated circuit comprising a plurality of cores attached to at least one transmitter and receiver, an optical transmission network embedded within the wire levels of the integrated circuit, and wherein the transmitter and receivers send and receive data on the network. Also disclosed is a method of transmitting signals within an integrated circuit comprising an integrated circuit comprising a plurality of cores and optical paths, selecting an optical path from the plurality of optical paths for transmitting data, and transmitting the data on the selected optical path. Also disclosed is an integrated circuit comprising an optical transmission network, a plurality of cores, and a plurality of controllers, all three being operatively attached to each other.